M-100MC

SERVICE MANUAL

Ver. 1.1 2005.05

US Model
Canadian Model
AEP Model
E Model
Tourist Model

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MZ-100MC-14

SPECIFICATIONS

Tape
MICROCASSETTE™ (normal position type)
Recording system
2-track 1-channel monaural
Speaker
Approx. 2.8cm (1 1/8 in.) dia.
Tape speed
2.4cm/s (15/16 ips), 1.2cm/s (15/32 ips)
Frequency range
High : 400 – 3,000Hz
Normal, Low : 400 – 4,000Hz
Output
Earphone jack (minijack) for 8 – 300ohms earphone
Power output (at 10% harmonic distortion)
220mW
Battery life (Approx. hours) (EIAJ*)

Batteries	Recording
Sony alkaline LR6 (SG)	16.0
Sony R6P (SR)	5.5

* Measured value by the standard of EIAJ (Electronic Industries Association of Japan) (Using a Sony Microcassette MC-60)

Power requirements
3V DC
Two R6 (size AA) batteries
Dimensions (w/h/d)
Approx. 126.0 x 68.0 x 40.8 mm (5 x 2 3/4 x 1 5/8 in.) incl. projecting parts and controls

Mass
Approx. 180g (6.4 oz) incl. batteries

Supplied Accessories
Hand strap (attached to the unit) (1)
Microcassette tape (1) (EXCEPT US, Canadian, AEP model)
Wind screen (1) (US model)
R6 (size AA) batteries (2) (Tourist model)
Earphone (1) (Tourist model)

Design and specifications are subject to change without notice.

MICROCASSETTE™-CORDER

9-923-382-12
2005E02-1
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Sony Corporation
Personal Audio Group
Published by Sony Engineering Corporation

SONY®

SECTION 1
GENERAL

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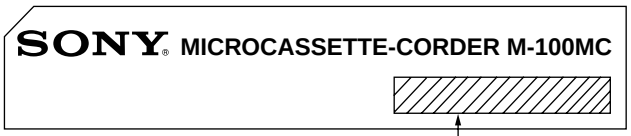
MODEL IDENTIFICATION



Indication of country of origin :
US, Canadian, AEP, E, Tourist model
No indication of country of origin : 1E model

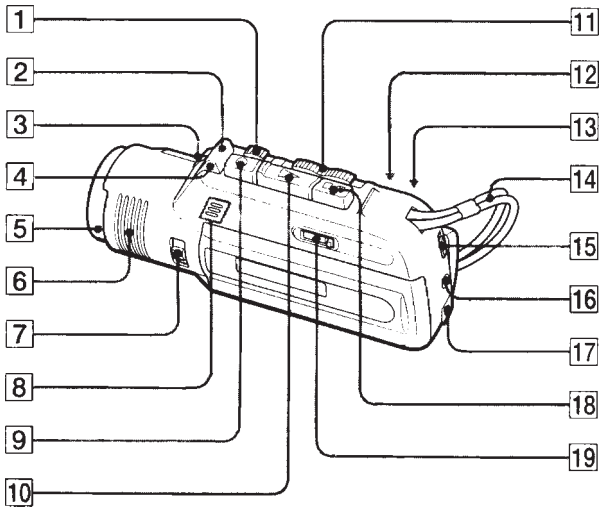
Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

LOCATION AND FUNCTION OF CONTROLS



1 ❚❚ PAUSE switch
2 CUE MARKER button
3 VOL control
4 REC indicator
5 Microphone
6 Speaker
7 SENSITIVITY selector
8 BATT indicators and ⍁ indicator
9 ● (recording) button
10 ► (playback) button
11 ►► (fast-forward)/(cue) • ◄◄ (rewind)/(review) switch
12 VOR switch
13 FIRST PB switch
14 Handstrap
15 TAPE SPEED switch
16 EAR jack
17 DC IN 3V jack
18 ■◄❙ (stop/eject) button
19 TAPE COUNTER

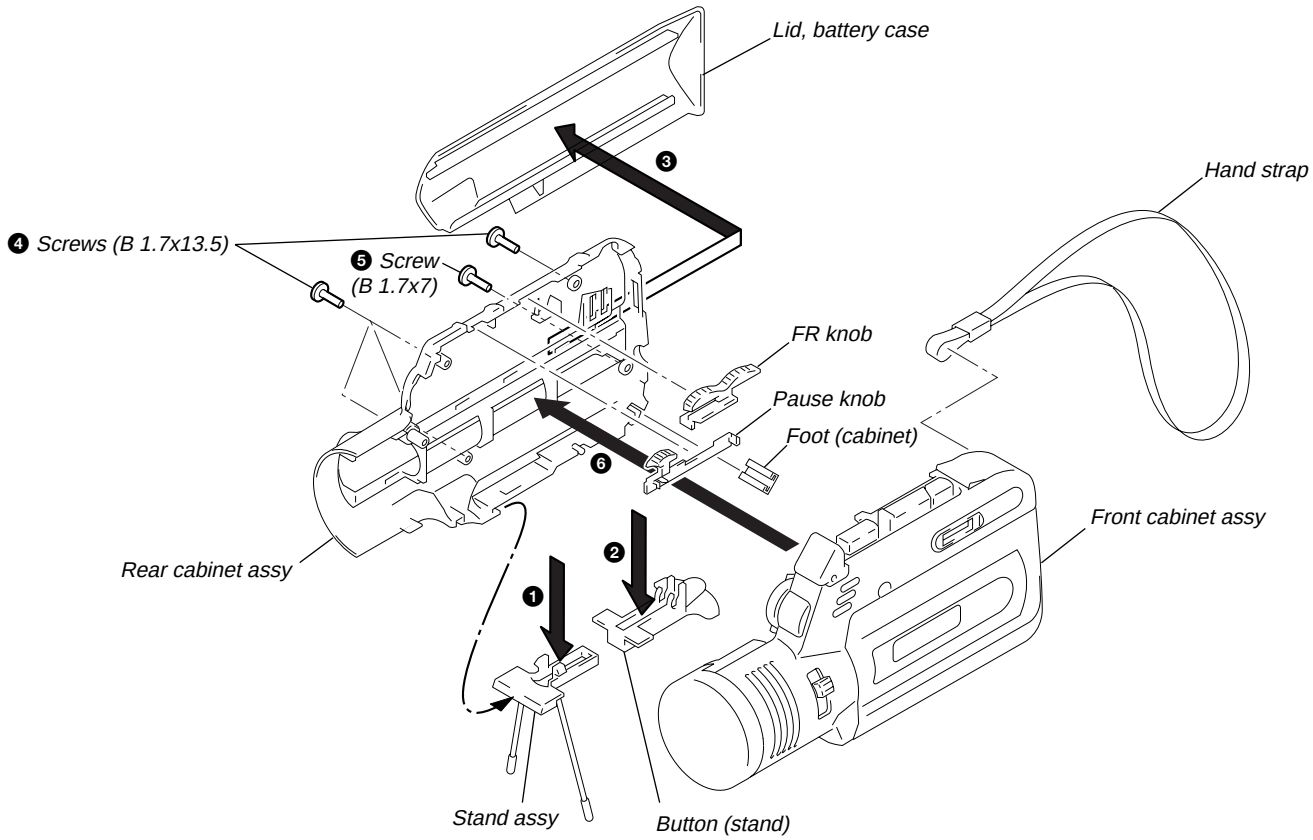
SECTION 2
DISASSEMBLY

● The equipment can be removed using the following procedure.

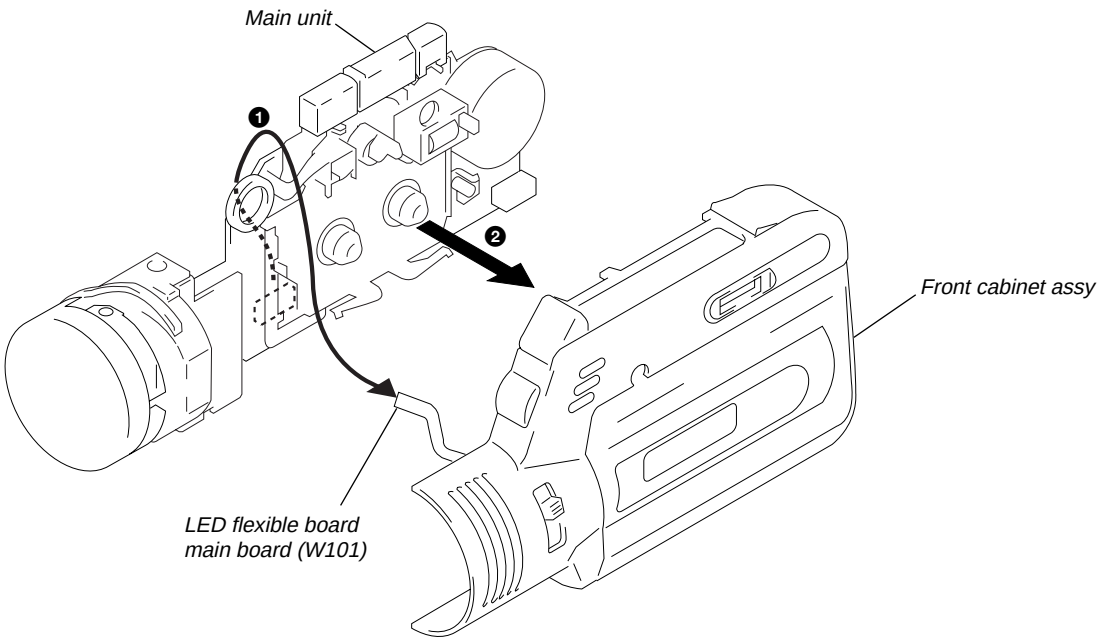
Set → Rear cabinet assy → Main unit → Mechanism deck
Main unit → MIC-SP block assy, Main board
Rear cabinet assy → Front cabinet assy → LED board
Front cabinet assy → Cassette lid assy

Note : Follow the disassembly procedure in the numerical order given.

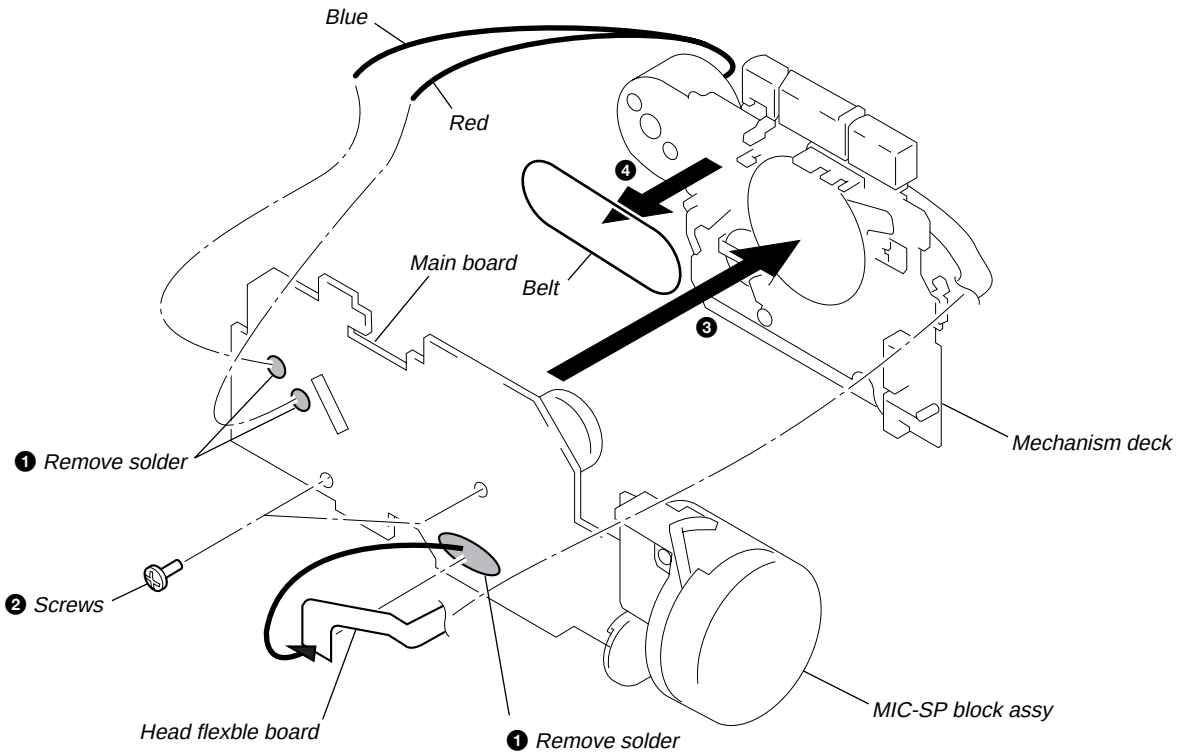
2-1. REAR CABINET ASSY REMOVAL



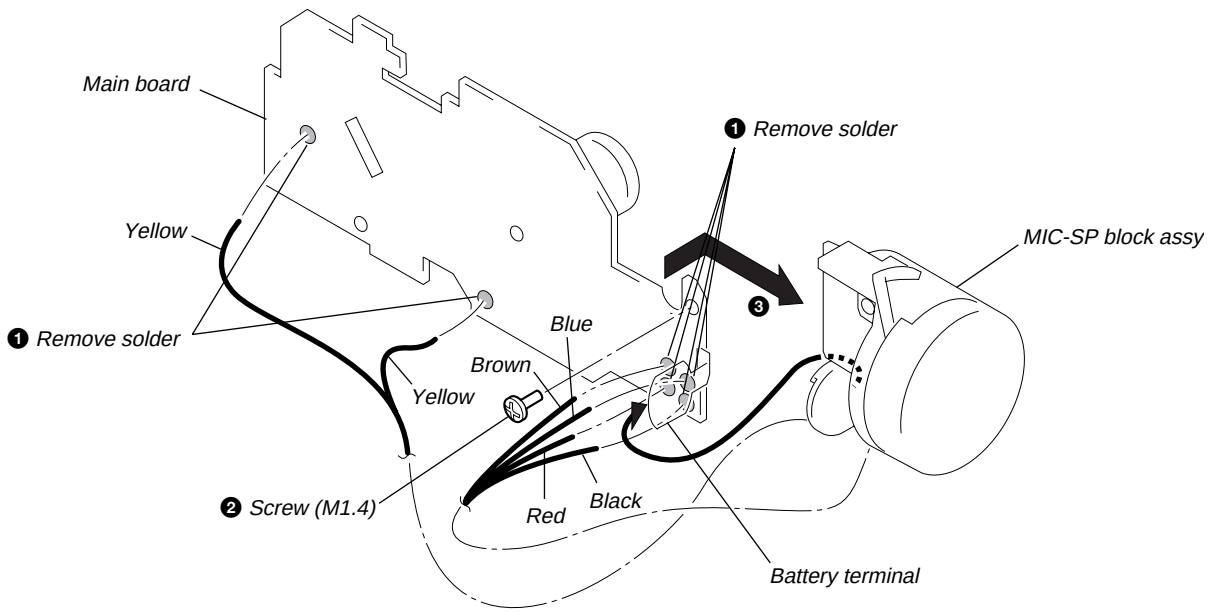
2-2. FRONT CABINET ASSY, MAIN UNIT REMOVAL



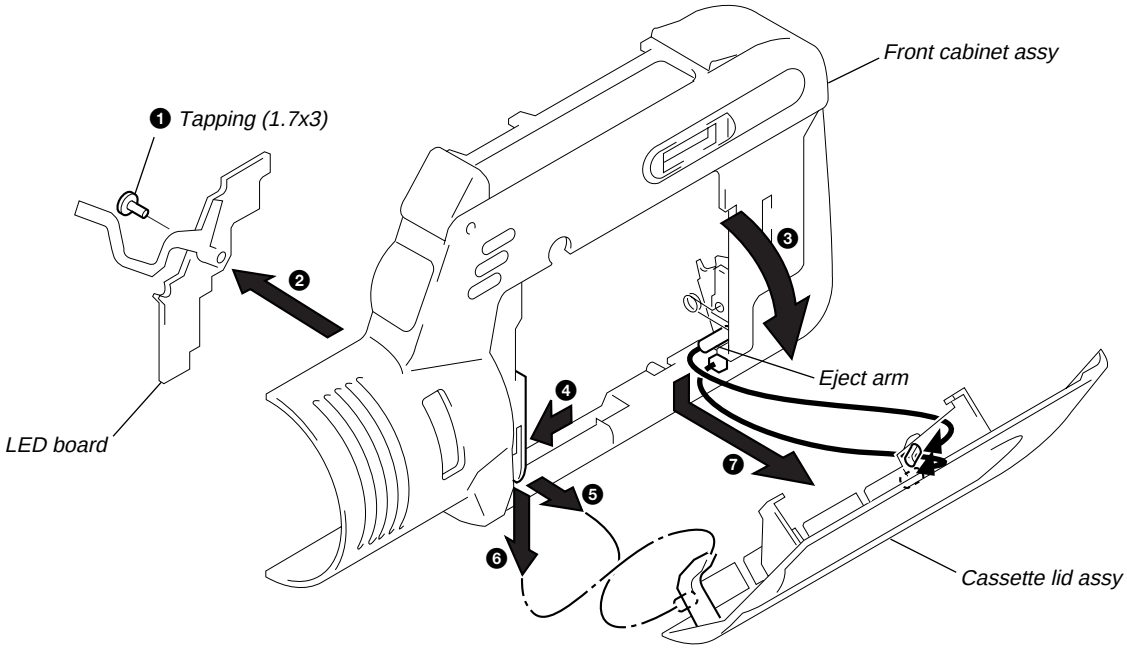
2-3. MECHANISM DECK REMOVAL



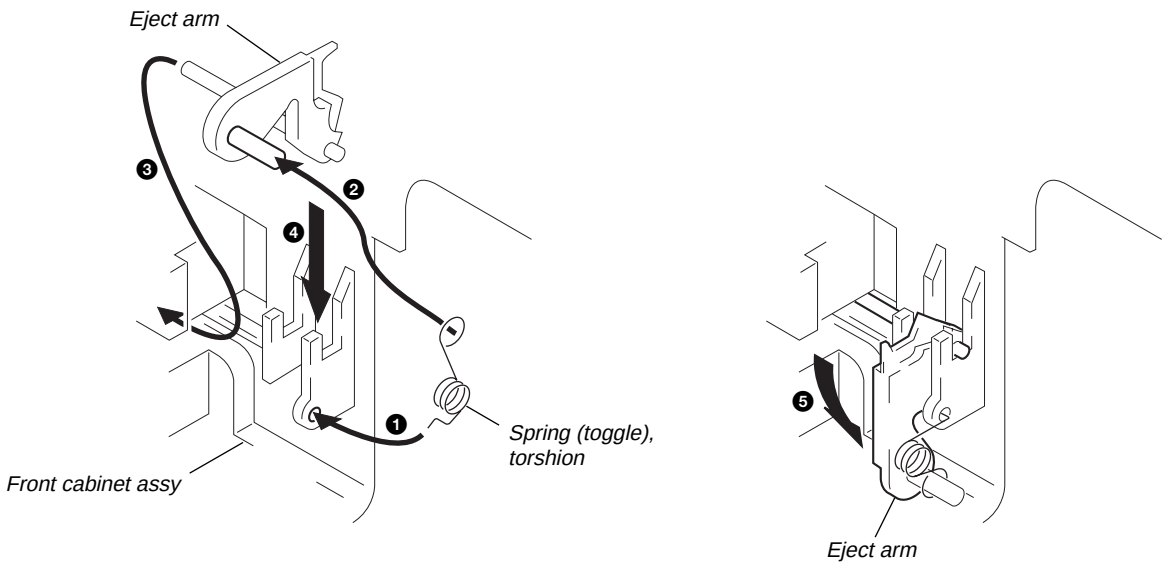
2-4. MIC-SP BLOCK ASSY, MAIN BOARD REMOVAL



2-5. LED BOARD, CASSETTE LID ASSY REMOVAL



2-6. EJECT ARM INSTALLATION



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Before adjusting, clean the following parts with a piece of cotton moistened with alcohol.
   record/playback/erase head pinch roller
   rubber belt capstan
2. Demagnetize the record/playback/erase head using a head demagnetizer.
3. Do not use a magnetized screwdriver for adjustments.
4. After adjusting, apply screw-locking compound to the adjusted parts.
5. Unless specified otherwise, use a specified voltage (3V DC) to perform the adjustments.

Torque Measurement

Tape Speed switch : 2.4cm

Mode	Torque Meter	Meter Reading
Forward	CQ-103M	5 – 13 g • cm (0.07 to 0.180 oz• inch)
Fast Forward	CQ-201M	5 – 13 g • cm (0.07 to 0.180 oz• inch)
Rewind	CQ-201M	more than 20 g • cm (more than 0.28 oz• inch)

Tape Tension Measurement

Tape Speed switch : 2.4cm/s

Mode	Torque Meter	Meter Reading
FWD	CQ-403M	more than 30 g (more than 1.06 oz)

3-2. ELECTRICAL ADJUSTMENTS

Standard Output Level

Output terminal	EAR
Load impedance	10kΩ
Output level	78mV (– 20dB)

Test Tape

Type	Signal	Used for	Tape speed (cm/s)
S-2-A030A	3kHz, –20dB	Azimuth Adjustment	2.4
WS-24	3kHz, –10dB	Tape Speed Adjustment	2.4
WS-12			1.2

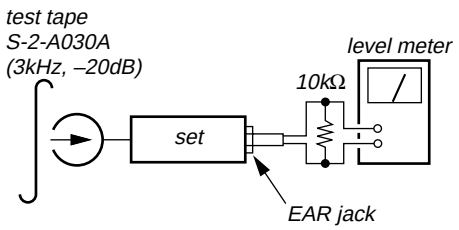
0dB=0.775V

Record/Playback/Erase Head Azimuth Adjustment

Switch position
VOL control : Mechanical center
TAPE SPEED switch : 2.4cm
VOR switch : OFF

Procedure :

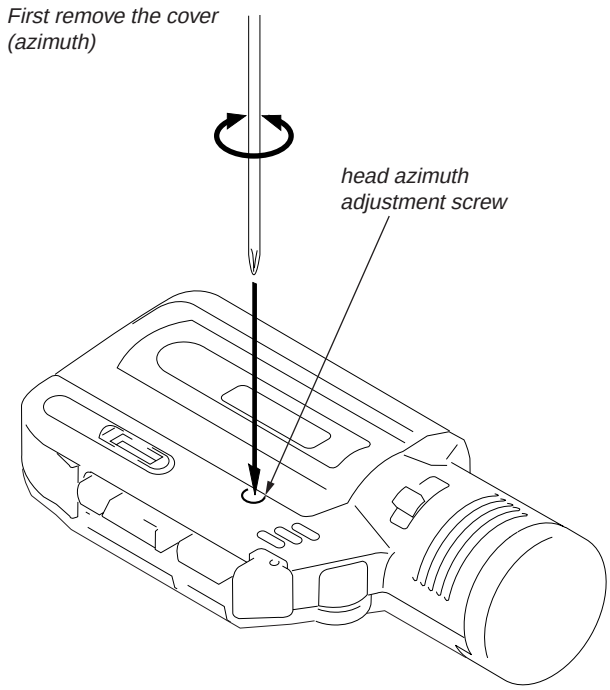
– FWD/REV playback –



• Rotate the screw to adjust level meter reading to the maximum.

Note : Adjust to the maximum peak though ther may be two or three peaks

Adjustment Location :



Tape Speed Adjustment

Switch position

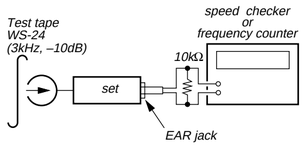
VOL contorl : Mechanical center

VOR switch : OFF

Procedure :

After adjusting the 1.2cm/s speed, adjust the 2.4cm/s speed.

– Playback –



Adjustment Value :

Adjustment Part	Speed	Speed checker	Frequency counter
RV601	1.2cm/s	– 3% ~ + 3%	1,455 – 1,545Hz
RV602	2.4cm/s	– 3% ~ + 3%	2,910 – 3,090Hz

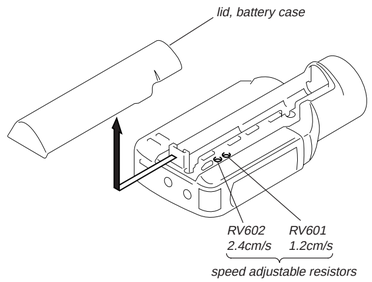
Frequency difference between the beginning and the end of the tape should be within 0.5%.

2.4cm/s (15Hz)

1.2cm/s (7.5Hz)

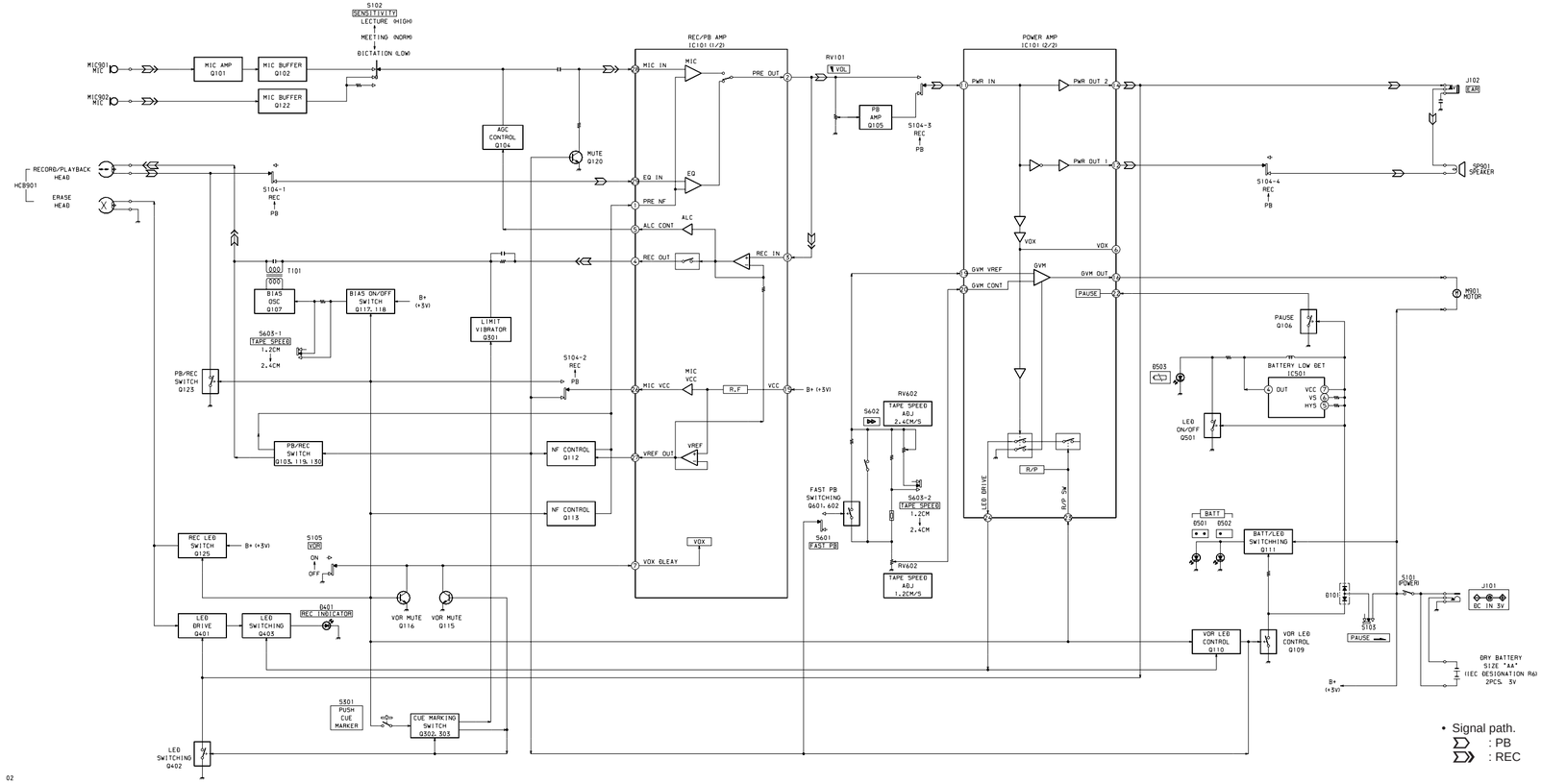
Adjustment Location :

– Back view –



SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM



4-2. PRINTED WIRING BOARDS

● SEMICONDUCTOR LOCATION

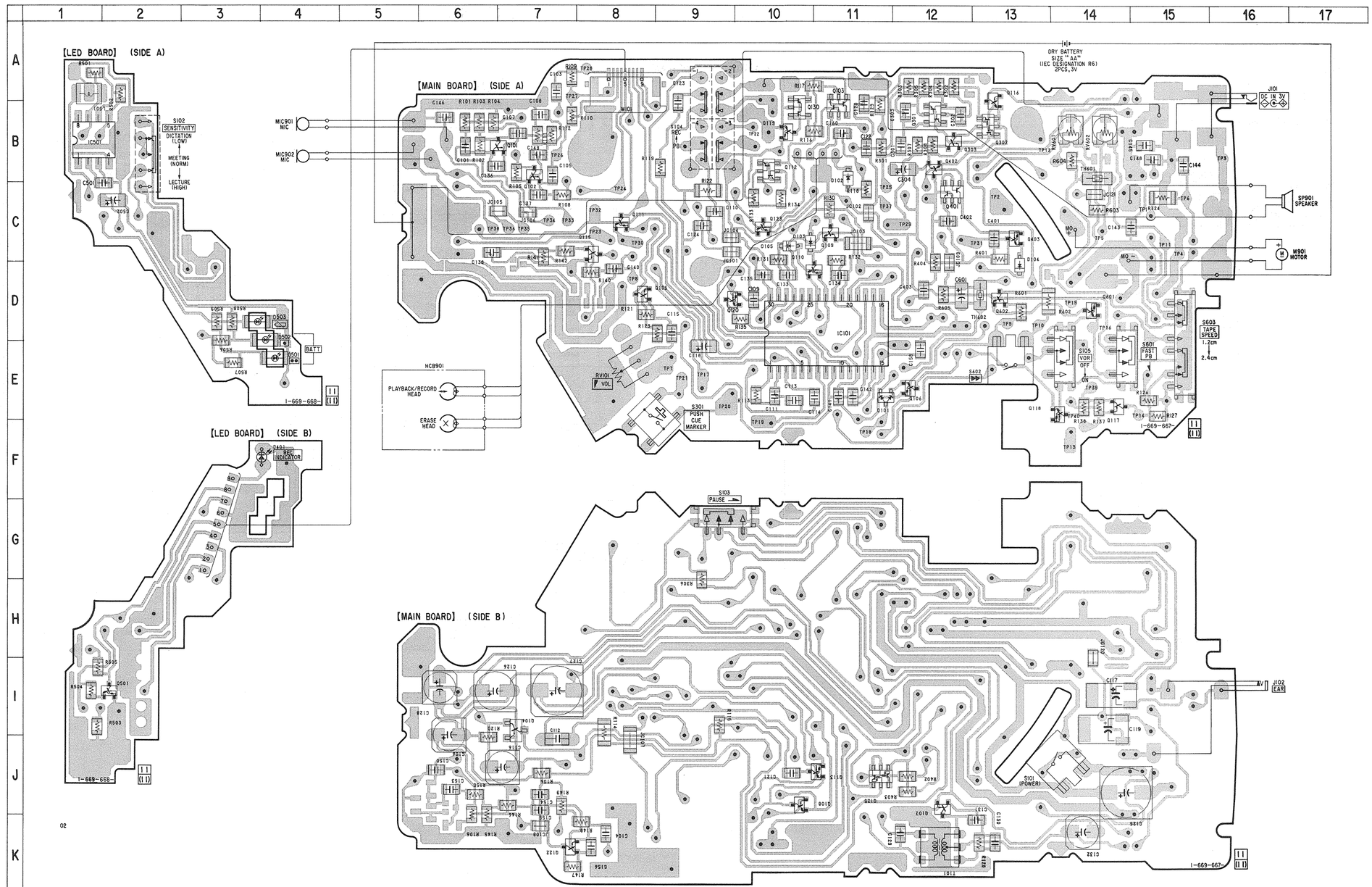
Ref. No.	Location
D101	E-11
D102	B-11
D103	C-10
D104	C-13
D105	C-10
D401	F-4
D501	E-4
D502	D-4
D503	D-4
IC101	D-11
IC501	B-1
Q101	B-7
Q102	B-7
Q103	B-11
Q104	I-7
Q105	D-8
Q106	E-12
Q107	J-12
Q108	J-10
Q109	C-11
Q110	D-10
Q111	C-8
Q112	B-10
Q113	J-11
Q115	C-8
Q116	A-13
Q117	E-14
Q118	E-14
Q119	B-10
Q120	D-9
Q122	K-7
Q123	C-10
Q125	J-11
Q130	B-10
Q301	B-12
Q302	B-13
Q303	B-12
Q401	C-12
Q402	B-12
Q403	C-13
Q501	I-2
Q601	D-14
Q602	D-13

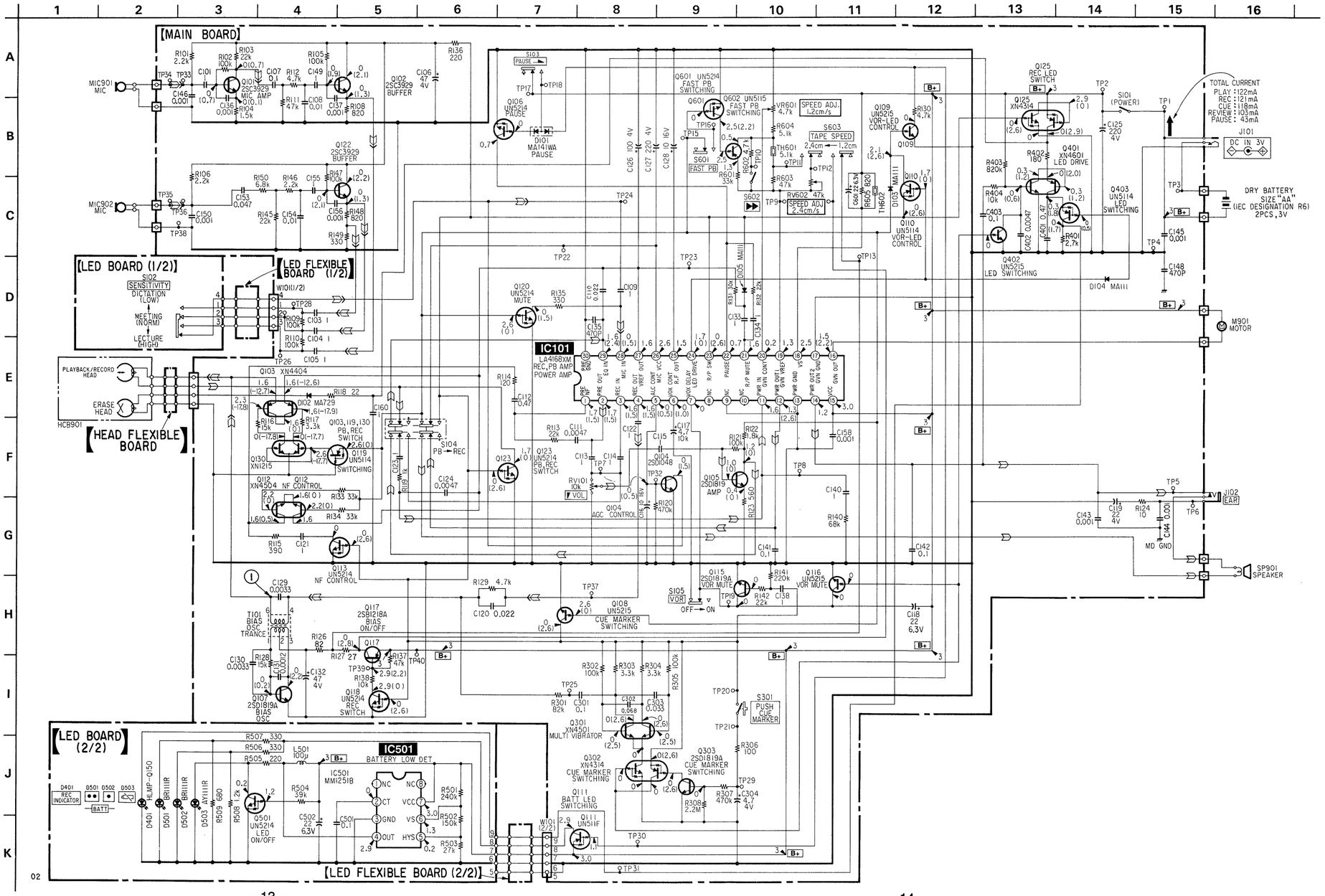
Note:

- ○——— : parts extracted from the component side.
- ● : Through hole.
- ▒▒▒ : Pattern from the side which enables seeing.

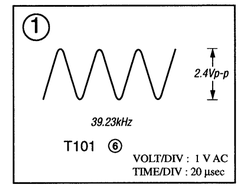
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.





● WAVEFORM

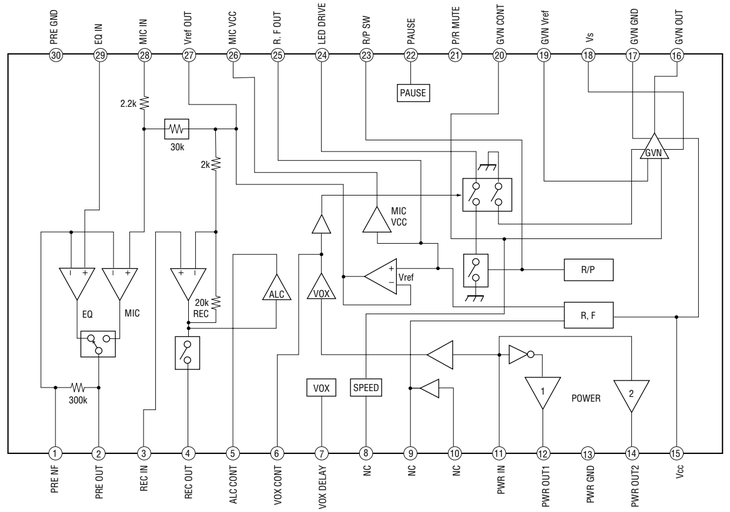


Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line.
- ▭ : adjustment for repair.
- Power voltage is dc 3V and fed with regulated dc power supply from external power voltage jack (J101).
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : PLAY
  ( ) : REC
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▷ : PB
  ▷▷ : REC

● IC BLOCK DIAGRAM

IC101 LA4168ML-TE-L



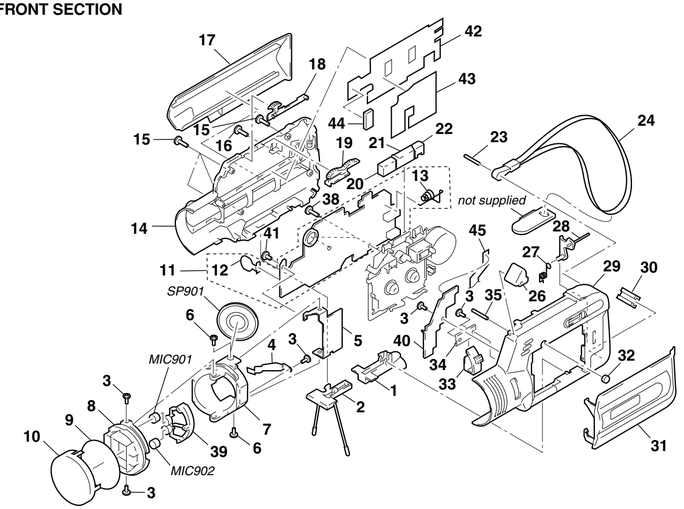
Ver. 1.1

SECTION 5
EXPLODED VIEWS

NOTE :

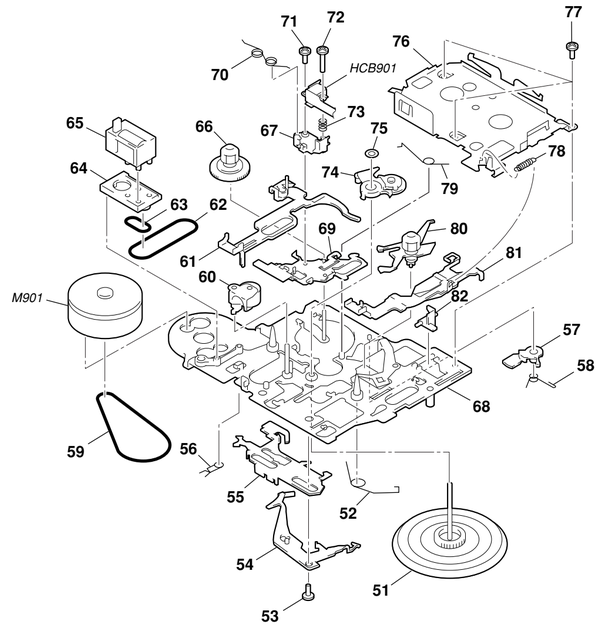
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  E :Indication of country of origin
  1E :No indication of country of origin

5-1. FRONT SECTION



Ref. No.	Part No.	Description	Remark
1	3-025-026-01	BUTTON (STAND)	
2	X-3375-565-1	STAND ASSY	
3	3-318-382-31	SCREW (1.7X3), TAPPING	
* 4	3-025-036-01	BRACKET (SPK)	
* 5	3-025-030-01	BRACKET (M-SP)	
6	3-704-197-91	SCREW (IB LOCK)	
7	3-025-031-01	HOLDER (M-SP)	
8	3-025-024-01	BRACKET (PANEL MIC)	
9	3-025-043-01	SHEET (WS)	
10	3-025-023-01	PANEL (MIC)	
11	A-3021-101-A	MAIN BOARD, COMPLETE	
12	3-025-037-01	TERMINAL, BATTERY	
13	3-025-038-01	SPRING, BATTERY COIL	
14	X-3375-600-1	CABINET (REAR) ASSY (EXCEPT 1E)	
14	X-3375-956-1	CABINET (REAR) ASSY (1E)	
15	3-334-565-21	SCREW (B1.7X13.5), TAPPING	
16	3-318-203-82	SCREW (B1.7X7), TAPPING	
17	3-025-019-01	LID, BATTERY CASE	
18	3-025-017-01	KNOB (PAUSE)	
19	3-025-018-01	KNOB (FR)	
20	3-010-491-01	BUTTON (REC)	
21	3-010-492-01	BUTTON (PLAY)	
22	3-010-493-01	BUTTON (STOP)	
23	3-669-481-07	PIN (DIA.1X10), PARALLEL	
24	3-328-319-31	STRAP, HAND	
26	3-025-013-11	BUTTON (CUE)	
27	3-027-880-01	SPRING (TOGGLE), TORSION	
28	3-010-499-01	ARM (EJECT)	
29	X-3375-599-1	CABINET (FRONT) ASSY	
30	3-025-029-01	FOOT (CABINET)	
31	X-3375-566-1	LID ASSY, CASSETTE	
32	3-025-039-01	COVER (AZIMUTH)	
33	3-025-033-01	KNOB (SENSITIVITY SELECTION)	
* 34	3-025-040-01	BRACKET (SENSITIVITY)	
35	3-669-481-05	PIN (DIA.1X15), PARALLEL	
38	3-342-156-61	SCREW	
39	3-025-032-01	CUSHION, MICROPHONE	
40	A-3021-100-A	LED BOARD, COMPLETE	
41	3-345-648-01	SCREW (M1.4), TOOTHED LOCK	
42	3-025-041-01	SHEET (BLIND)	
43	3-025-042-01	PAPER, SHIELD	
44	3-026-293-01	CUSHION (BATTERY)	
45	1-669-666-11	LED FLEXIBLE BOARD	
MIC901	1-542-348-11	MICROPHONE, ELECTRET CONDENSER	
MIC902	1-542-298-11	MICROPHONE, ELECTRET CONDENSER	
SP901	1-505-918-11	SPEAKER (2.8cm)	

5-2. MECHANISM DECK SECTION (MZ-100MC-14)



Ref. No.	Part No.	Description	Remark
51	X-3371-272-1	FLYWHEEL (M) ASSY	
52	3-914-904-01	SPRING (PFR), TORSION	
53	3-704-243-11	SCREW (P1.7X2.0)	
* 54	3-023-941-01	PLATE (FR), LOCK	
* 55	3-914-919-01	SLIDER (FR)	
56	3-914-903-01	SPRING (FR), TORSION	
57	3-914-915-01	ARM (S.OFF)	
58	3-914-906-01	SPRING (S.OFF), TORSION	
59	3-377-420-11	BELT	
60	X-3368-585-1	PINCH LEVER ASSY	
61	X-3375-404-1	LEVER (STOP) ASSY	
62	3-343-948-01	BELT	
63	3-023-935-01	BELT	
64	X-3375-403-1	BRACKET ASSY, COUNTER	
65	1-251-705-11	COUNTER, TAPE	
66	X-3368-582-1	REEL ASSY, T	
67	3-914-914-12	GUIDE, TAPE	
* 68	X-3369-557-1	CHASSIS COMPLETE ASSY (D)	
* 69	3-914-913-01	LEVER (PLAY)	
70	3-914-902-01	SPRING (P), TORSION	
71	3-704-245-42	SCREW (1.4)	
72	3-366-746-51	SCREW (M1.4X6.5)	
73	3-378-792-01	SPRING, COMPRESSION	
74	X-3368-584-1	ARM (MIDWAY GEAR) ASSY	
75	3-331-007-21	WASHER	
* 76	3-914-923-11	COVER, MD	
77	3-331-047-01	SCREW (M1.4X1.4),SPECIAL HEAD	
78	3-914-908-01	SPRING (REC LOCK), TENSION	
79	3-914-907-01	SPRING (MIDWAY GEAR), TORSION	
80	X-3368-587-1	REEL ASSY, S	
* 81	X-3368-583-1	LEVER (REC) ASSY	
82	3-914-916-01	ARM (CLAW DETECTION)	
HCB901	1-500-527-11	HEAD,MAGNETIC(RECODE/PLAYBACK/ERASE)	
M901	1-698-533-21	MOTOR, DC	

SECTION 6
ELECTRICAL PARTS LIST

LED **MAIN**

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ , for example :
  uA.... : µ A.... , uPA.... : µ PA....
  uPB.... : µ PB.... , uPC.... : µ PC....
  uPD.... : µ PD....
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H

- Abbreviation
  E : Indication of country of origin
  1E : No indication of country of origin

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-3021-100-A	LED BOARD, COMPLETE			
		**********			
	1-669-666-11	LED FLEXIBLE BOARD			
		< CAPACITOR >			
C501	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C502	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
		< DIODE >			
D401	8-719-985-81	LED HLMP-Q150 (REC)			
D501	8-719-062-42	LED BR1111R-TR (BATT ••)			
D502	8-719-062-42	LED BR1111R-TR (BATT •)			
D503	8-719-062-43	LED AY1111R-TR (⇦)			
		< IC >			
IC501	8-759-399-49	IC MM1251BFBE			
		< COIL >			
L501	1-412-032-11	INDUCTOR CHIP 100uH			
		< TRANSISTOR >			
Q501	8-729-402-93	TRANSISTOR UN5214-TX			
		< RESISTOR >			
R501	1-216-106-00	METAL CHIP	240K	5%	1/10W
R502	1-216-101-00	METAL CHIP	150K	5%	1/10W
R503	1-216-083-00	METAL CHIP	27K	5%	1/10W
R504	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R505	1-216-033-00	METAL CHIP	220	5%	1/10W
R506	1-216-037-00	METAL CHIP	330	5%	1/10W
R507	1-216-037-00	METAL CHIP	330	5%	1/10W
R508	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R509	1-216-045-00	METAL CHIP	680	5%	1/10W
		< SWITCH >			
S102	1-570-386-11	SWITCH, SLIDE (SENSITIVITY)			
**********					
	A-3021-101-A	MAIN BOARD, COMPLETE			
		**********			
	3-025-037-01	TERMINAL, BATTERY			
	3-025-038-01	SPRING, BATTERY COIL			
		< CAPACITOR >			
C101	1-164-346-11	CERAMIC CHIP	1uF		16V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C104	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-164-346-11	CERAMIC CHIP	1uF		16V
C106	1-126-607-11	ELECT CHIP	47uF	20%	4V
C107	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C108	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C109	1-164-346-11	CERAMIC CHIP	1uF		16V
C110	1-163-037-11	CERAMIC CHIP	0.022uF		50V
C111	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C112	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C113	1-164-346-11	CERAMIC CHIP	1uF		16V
C114	1-164-346-11	CERAMIC CHIP	1uF		16V
C115	1-164-346-11	CERAMIC CHIP	1uF		16V
C116	1-124-779-00	ELECT CHIP	10uF	20%	16V
C117	1-128-024-11	ELECT CHIP	4.7uF	20%	10V
C118	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
C119	1-128-015-11	ELECT CHIP	22uF	20%	4V
C120	1-163-037-11	CERAMIC CHIP	0.022uF	10%	50V
C121	1-164-346-11	CERAMIC CHIP	1uF		16V
C122	1-164-346-11	CERAMIC CHIP	1uF		16V
C123	1-164-346-11	CERAMIC CHIP	1uF		16V
C124	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C125	1-126-246-11	ELECT CHIP	220uF	20%	4V
C126	1-126-209-11	ELECT CHIP	100uF	20%	4V
C127	1-126-246-11	ELECT CHIP	220uF	20%	4V
C128	1-124-779-00	ELECT CHIP	10uF	20%	16V
C129	1-164-699-11	CERAMIC CHIP	0.0033uF	5%	50V
C130	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C131	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C132	1-126-607-11	ELECT CHIP	47uF	20%	4V
C133	1-164-346-11	CERAMIC CHIP	1uF		16V
C134	1-164-346-11	CERAMIC CHIP	1uF		16V
C135	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C136	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C137	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C138	1-164-346-11	CERAMIC CHIP	1uF		16V
C140	1-164-346-11	CERAMIC CHIP	1uF		16V
C141	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C142	1-163-038-91	CERAMIC CHIP	0.1uF		25V

MAIN

Ref. No.	Part No.	Description			Remark
C143	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C144	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C145	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C146	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C148	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C149	1-164-346-11	CERAMIC CHIP	1uF		16V
C150	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C153	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C154	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C155	1-164-346-11	CERAMIC CHIP	1uF		16V
C156	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C158	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C160	1-164-346-11	CERAMIC CHIP	1uF		16V
C301	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C302	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C303	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C304	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C401	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C402	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C403	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C601	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
		< DIODE >			
D101	8-719-820-05	DIODE 1SS181			
D102	8-719-420-51	DIODE MA729			
D103	8-719-404-49	DIODE MA111			
D104	8-719-404-49	DIODE MA111			
D105	8-719-404-49	DIODE MA111			
		< IC >			
IC101	8-759-492-49	IC LA4168ML-TE-L			
		< JACK >			
J101	1-750-061-11	JACK,DC(POLARITY UNIFIED TYPE)			(DC IN 3V)
J102	1-784-848-21	JACK (EAR)			
		< JUMPER RESISTOR >			
JC101	1-216-295-00	METAL CHIP	0	5%	1/10W
JC102	1-216-295-00	METAL CHIP	0	5%	1/10W
JC103	1-216-296-00	METAL CHIP	0	5%	1/8W
JC104	1-216-295-00	METAL CHIP	0	5%	1/10W
JC105	1-216-295-00	METAL CHIP	0	5%	1/10W
JC106	1-216-295-00	METAL CHIP	0	5%	1/10W
JC107	1-216-296-00	METAL CHIP	0	5%	1/8W
JC108	1-216-295-00	METAL CHIP	0	5%	1/10W
JC109	1-216-295-00	METAL CHIP	0	5%	1/10W
JC120	1-216-295-00	METAL CHIP	0	5%	1/10W
JC121	1-216-295-00	METAL CHIP	0	5%	1/10W
		< TRANSISTOR >			
Q101	8-729-429-74	TRANSISTOR 2SC3929			
Q102	8-729-429-74	TRANSISTOR 2SC3929			
Q103	8-729-422-39	TRANSISTOR XN4404			
Q104	8-729-800-37	TRANSISTOR 2SD1048-X7			
Q105	8-729-230-63	TRANSISTOR 2SC4116-YG			
Q106	8-729-402-93	TRANSISTOR UN5214-TX			

Ref. No.	Part No.	Description			Remark
Q107	8-729-230-63	TRANSISTOR 2SC4116-YG			
Q108	8-729-420-50	TRANSISTOR UN5215			
Q109	8-729-420-50	TRANSISTOR UN5215			
Q110	8-729-402-96	TRANSISTOR UN5114			
Q111	8-729-028-30	TRANSISTOR UN511F			
Q112	8-729-425-18	TRANSISTOR XN4504			
Q113	8-729-402-93	TRANSISTOR UN5214-TX			
Q115	8-729-230-63	TRANSISTOR 2SC4116-YG			
Q116	8-729-420-50	TRANSISTOR UN5215			
Q117	8-729-420-24	TRANSISTOR 2SB1218A-QRS			
Q118	8-729-402-93	TRANSISTOR UN5214-TX			
Q119	8-729-402-96	TRANSISTOR UN5114			
Q120	8-729-402-93	TRANSISTOR UN5214-TX			
Q122	8-729-429-74	TRANSISTOR 2SC3929			
Q123	8-729-402-93	TRANSISTOR UN5214-TX			
Q125	8-729-429-71	TRANSISTOR XN4314			
Q130	8-729-403-17	TRANSISTOR XN1215			
Q301	8-729-402-81	TRANSISTOR XN4501			
Q302	8-729-429-71	TRANSISTOR XN4314			
Q303	8-729-230-63	TRANSISTOR 2SC4116-YG			
Q401	8-729-402-84	TRANSISTOR XN4601			
Q402	8-729-420-50	TRANSISTOR UN5215			
Q403	8-729-402-96	TRANSISTOR UN5114			
Q601	8-729-402-93	TRANSISTOR UN5214-TX			
Q602	8-729-420-53	TRANSISTOR UN5115			
		< RESISTOR >			
R101	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R102	1-216-097-91	RES,CHIP	100K	5%	1/10W
R103	1-216-081-00	METAL CHIP	22K	5%	1/10W
R104	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R105	1-216-097-91	RES,CHIP	100K	5%	1/10W
R106	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R108	1-216-047-91	RES,CHIP	820	5%	1/10W
R109	1-216-097-91	RES,CHIP	100K	5%	1/10W
R110	1-216-097-91	RES,CHIP	100K	5%	1/10W
R111	1-216-089-91	RES,CHIP	47K	5%	1/10W
R112	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R113	1-216-081-00	METAL CHIP	22K	5%	1/10W
R114	1-216-176-11	RES,CHIP	120	5%	1/8W
R115	1-216-039-00	METAL CHIP	390	5%	1/10W
R116	1-216-077-00	METAL CHIP	15K	5%	1/10W
R117	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R118	1-216-009-00	METAL CHIP	22	5%	1/10W
R119	1-216-049-91	RES,CHIP	1K	5%	1/10W
R120	1-216-113-00	METAL CHIP	470K	5%	1/10W
R121	1-216-097-91	RES,CHIP	100K	5%	1/10W
R122	1-216-204-00	RES,CHIP	1.8K	5%	1/8W
R123	1-216-043-91	RES,CHIP	560	5%	1/10W
R124	1-216-150-91	RES,CHIP	10	5%	1/8W
R126	1-216-023-00	METAL CHIP	82	5%	1/10W
R127	1-216-011-00	METAL CHIP	27	5%	1/10W
R128	1-216-077-00	METAL CHIP	15K	5%	1/10W
R129	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R130	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R131	1-216-084-00	METAL CHIP	30K	5%	1/10W
R132	1-216-081-00	METAL CHIP	22K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R133	1-216-085-00	METAL CHIP	33K	5%	1/10W
R134	1-216-085-00	METAL CHIP	33K	5%	1/10W
R135	1-216-037-00	METAL CHIP	330	5%	1/10W
R136	1-216-033-00	METAL CHIP	220	5%	1/10W
R137	1-216-089-91	RES,CHIP	47K	5%	1/10W
R138	1-216-073-00	METAL CHIP	10K	5%	1/10W
R140	1-216-093-00	METAL CHIP	68K	5%	1/10W
R141	1-216-105-91	RES,CHIP	220K	5%	1/10W
R142	1-216-081-00	METAL CHIP	22K	5%	1/10W
R145	1-216-081-00	METAL CHIP	22K	5%	1/10W
R146	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R147	1-216-097-91	RES,CHIP	100K	5%	1/10W
R148	1-216-041-00	METAL CHIP	470	5%	1/10W
R149	1-216-037-00	METAL CHIP	330	5%	1/10W
R150	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R301	1-216-095-00	METAL CHIP	82K	5%	1/10W
R302	1-216-097-91	RES,CHIP	100K	5%	1/10W
R303	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R304	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R305	1-216-097-91	RES,CHIP	100K	5%	1/10W
R306	1-216-025-91	RES,CHIP	100	5%	1/10W
R307	1-216-113-00	METAL CHIP	470K	5%	1/10W
R308	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R401	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R402	1-216-031-00	METAL CHIP	180	5%	1/10W
R403	1-216-119-00	METAL CHIP	820K	5%	1/10W
R404	1-216-073-00	METAL CHIP	10K	5%	1/10W
R601	1-216-085-00	METAL CHIP	33K	5%	1/10W
R602	1-216-214-00	RES,CHIP	4.7K	5%	1/8W
R603	1-216-089-91	RES,CHIP	47K	5%	1/10W
R604	1-216-066-00	METAL CHIP	5.1K	5%	1/10W
R605	1-216-047-91	RES,CHIP	820	5%	1/10W

< VARIABLE RESISTOR >

RV101	1-225-597-11	RES, VAR, CARBON 10K (VOL)
RV601	1-238-663-11	RES, ADJ, CARBON 4.7K (TAPE SPEED 1.2cm/s)
RV602	1-223-997-21	RES, CARBON ADJ VAR 47K (TAPE SPEED 2.4cm/s)

< SWITCH >

S101	1-572-688-11	SWITCH, PUSH (1 KEY) (POWER)
S103	1-572-922-11	SWITCH, SLIDE (PAUSE ⇥)
S104	1-692-999-11	SWITCH, SLIDE (PB/REC)
S105	1-572-922-11	SWITCH, SLIDE (VOR)
S301	1-692-088-11	SWITCH, TACTILE (PUSH CUE MARKER)
S601	1-572-922-11	SWITCH, SLIDE (FAST PB)
S602	1-572-688-11	SWITCH, PUSH (1 KEY) (►►)
S603	1-571-277-51	SWITCH, SLIDE (TAPE SPEED)

< TRANSFORMER >

T101	1-433-286-11	TRANSFORMER, BIAS OSCILLATION

< THERMISTOR >

TH601	1-801-744-11	THERMISTOR, POSITIVE
TH602	1-810-552-11	THERMISTOR, POSITIVE

Ref. No.	Part No.	Description	Remark

< CONNECTOR >

W101	1-750-349-21	CONNECTOR, FFC/FPC (ZIF) 9P	

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MISCELLANEOUS
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45	1-669-666-11	LED FLEXIBLE BOARD	
65	1-251-705-11	COUNTER, TAPE	
HCB901	1-500-527-11	HEAD,MAGNETIC(RECODE/PLAYBACK/ERASE)	
M901	1-698-533-21	MOTOR, DC	
MIC901	1-542-348-11	MICROPHONE, ELECTRET CONDENSER	
MIC902	1-542-298-11	MICROPHONE, ELECTRET CONDENSER	
SP901	1-505-918-11	SPEAKER (2.8cm)	

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ACCESSORIES & PACKING MATERIALS
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*	2-283-326-01	LABEL, CAUTION (Tourist)	
	3-025-039-01	COVER (AZIMUTH)	
	3-862-343-11	MANUAL, INSTRUCTION (ENGLISH)	(US,Canadian,AEP)
	3-862-343-21	MANUAL, INSTRUCTION (FRENCH) (Canadian)	
	3-862-343-31	MANUAL, INSTRUCTION(FRENCH, PORTUGUESE,ITALIAN, DUTCH)	(AEP,E,Tourist)
	3-862-343-41	MANUAL, INSTRUCTION (GERMAN, SPANISH, SWEDISH, FINNISH)	(AEP)
	3-862-343-51	MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE, KOREAN)	(E,Tourist)
	3-862-343-61	MANUAL, INSTRUCTION (JAPANESE) (Tourist)	
	3-862-343-71	MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE, KOREAN)	(1E)
	8-952-251-90	HEADPHONE MDR-E122 SET	
	X-3375-567-1	SCREEN ASSY, WINDOW (US, Canadian, Tourist)	

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	1998.04	New
1.1	2005.05	Change of the supply classification of the stand (strap). (SPM-05063)